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IS 862 (1990): Handloom cotton ticking cloth [TXD 8:
Handloom and Khadi]



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“Knowledge is such a treasure which cannot be stolen”

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Indian Standard

**HANDLOOM COTTON TICKING CLOTH —
SPECIFICATION**

(First Revision)

भारतीय मानक

हथकरघे का सूती टिकिंग कपड़ा — विशिष्ट

(पहला पुनरीक्षण)

UDC 677.074

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BUREAU OF INDIAN STANDARDS
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NEW DELHI 110002

FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards on 28 March 1990, after the draft finalized by the Handloom and Khadi Sectional Committee had been approved by the Textile Division Council.

This standard was first published in 1956. This standard has been revised in order to overcome certain difficulties encountered by the handloom industry in implementation of this standard.

Following are the important changes carried out while revising this standard:

- a) Use of cotton yarn conforming to IS 171 : 1985 has been specified.
- b) Constructional particulars have been modified taking into consideration present production patterns prevailing in the handloom industry.
- c) Only negative tolerances have been specified on ends/dm, picks/dm and mass g/m² to ensure minimum desirable construction. There being no tolerance on positive side on these requirements, it would provide flexibility to industry to adjust construction of the fabrics depending upon market demands.
- d) Breaking load requirement has been specified as optional requirement. This is to be enforced in case it is not possible to establish that cotton yarn conforming to IS 171 : 1985 has been used in the production of cloth.
- e) Tolerance on length and width have been adopted from the instruction issued by the Central Government under Trade and Merchandise Marks Act, 1958 (43 of 1958) as given in Notification No. S.O. 2937, dated 20 September 1962.
- f) For determining the conformity of the cloth to the requirements laid down in this standard, a provision has been incorporated to allow testing of specimens in prevailing atmospheric condition. However, in all cases of disputes specimens shall be tested after conditioning in the standard atmospheric conditions.
- g) Provision has been incorporated for agreement between the buyer and the seller with respect to permissible number of defects in the cloth.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test or analysis, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (revised)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

HANDLOOM COTTON TICKING CLOTH — SPECIFICATION

(First Revision)

1 SCOPE

1.1 This standard prescribes constructional particulars and other requirements for two varieties of handloom cotton ticking cloth.

1.2 This standard does not specify the general appearance, feel, finish, etc., of the cloth.

2 REFERENCES

2.1 The Indian Standards listed at Annex A are necessary adjuncts to this standard.

3 ATMOSPHERIC CONDITIONS FOR TESTING

3.1 Test specimens may be conditioned and tested in the prevailing atmosphere for determining the conformity of the cloth to this standard. However, in all cases of disputes, specimens shall be conditioned and tested in the standard atmosphere as specified in the Indian Standards referred on test methods.

4 MANUFACTURE

4.1 Yarn

The cotton yarn used in the manufacture of cloth shall conform to the requirements specified in IS 171 : 1985.

4.2 The cloth shall be woven in 2/1 or 2/2 twill weave.

4.2.1 The cloth shall be either grey or scoured or bleached or dyed as required. The cloth shall be free from substances liable to cause subsequent tendering.

5 REQUIREMENTS

5.1 The cloth shall conform to the requirements

specified in Table 1.

5.1.1 However breaking load requirement shall be an optional requirement. It shall be enforced only when conformance of cotton yarn to the requirements specified in IS 171 : 1985 is not known.

5.2 The cloth shall also conform to the requirements specified in Table 2.

5.3 Dimensions

Length and width of the cloth when determined in accordance with IS 1954 : 1969 shall be as agreed to between the buyer and the seller or as declared by the seller subject to the tolerances specified in the Government of India, Ministry of Commerce and Industry Notification No. S.O. 2937 dated 20 September 1962 issued under Trade and Merchandise Marks Act, 1958 (43 of 1958) (*see* Annex B).

5.4 In order to illustrate or specify the indeterminate characteristics, such as general appearance, lustre, feel and shade of the cloth, a sample has been agreed upon and sealed, the supply shall be in conformity with the sample in such respects.

5.4.1 The custody of the sealed sample shall be a matter of prior agreement between the buyer and the seller.

6 INSPECTION

6.1 The cloth when visually inspected should be free from the major flaws listed at Annex C.

6.1.1 The number of permissible major flaws per metre shall be as agreed to between the buyer and the seller.

**Table 1 Constructional Particulars and Breaking Load Requirements for
Handloom Cotton Ticking Cloth**

(Clause 5.1)

Variety No.	Count of Yarn (for Guidance Only) Universal Count (Cotton Count)		Ends/dm	Picks/dm	Mass g/m ²	Breaking Load in Newton	
	Warp	Weft				Warp	Weft
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1	30 tex (16s)	60 tex (10s)	280	170	220	360	250
2	16 tex × 2 (36s/2)	36 tex (16s)	270	190	170	360	250
Tolerance percent	—	—	—5	—5	—5	—5 on Average value and —15 on Individual reading	
Method of test	—	—	IS 1963 : 1981	IS 1964 : 1970 or Annex D		IS 1969 : 1985	

6.2 For details of the flaws mentioned in 6.1, a reference may be made to IS 4125 : 1987.

7 MARKING

7.1 The cloth shall be suitably marked with the following information:

- Name of the material and variety No.,
- Length (m) and width (cm), and
- Indication of the source of manufacture.

7.1.1 The cloth may also be marked with the Standard Mark.

8 PACKING

8.1 Unless otherwise agreed upon by the buyer and seller the cloth shall be preferably packed in bales or cases in conformity with the procedure laid down in IS 1347 : 1972 or IS 293 : 1980.

Table 2 Other Requirements for Handloom Cotton Ticking Cloth
(Clause 5.2)

Characteristic (1)	Requirement (2)	Method of Test (3)
1) Dimensional change, percent, <i>Max</i>	4	IS 9 : 1982
2) Scouring loss, percent, <i>Max</i> :		IS 1383 : 1977
a) Grey	10	
b) Finished	2.5	
3) pH value of the aqueous extract	6.0 to 8.5	IS 1390 : 1983
4) Colour fastness:		
a) Light	4 or better	IS 686 : 1985 or IS 2454 : 1985 IS 687 : 1979
b) Washing: Test 1		
i) Change in colour	4 or better	
ii) Staining on fabric	4 or better	
c) Rubbing:		IS 766 : 1988
i) Dry	4 or better	
ii) Wet	4 or better	
d) Perspiration		IS 971 : 1988
i) Change in colour	4 or better	
ii) Staining on fabric	4 or better	

9 SAMPLING

9.1 Lot

The quantity of the cloth of the same variety delivered to one buyer against one despatch note shall constitute a lot.

9.2 The conformity of the lot to the various requirements specified in the standard shall be determined on the basis of tests carried out on the samples selected from the lot.

9.3 Unless otherwise agreed, the number of pieces selected at random for inspection shall be in accordance with Table 3.

Table 3 Sample Size and Permissible Number of Non-conforming Pieces
(Clauses 9.3 and 9.4)

Lot Size	Sample Size	Permissible Number of Non-conforming Pieces	Sub-sample Size
(1)	(2)	(3)	(4)
Up to 25	3	0	2
26 to 50	5	0	2
51 to 150	8	0	3
151 to 300	13	1	3
301 to 500	20	1	5
501 to 1 000	32	2	5
1 001 and above	50	3	8

9.3.1 For selection of samples at random from the lot, procedure given in IS 4905 : 1968 may be followed.

9.4 Number of Samples and Criteria for Conformity

It shall be as follows:

Characteristics	Number of Samples	Criteria for Conformity
Ends, picks, mass, length, width and visual inspection	According to col 2 of Table 3	Number of non-conforming pieces shall not exceed the corresponding number given in col 3
Dimensional change, colour fastness, scouring loss, pH value and breaking load	According to col 4 of Table 3	All the test pieces shall meet the requirement

ANNEX A

(Clause 2.1)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
9 : 1982	Method of determination of dimensional changes of woven fabrics on washing near the boiling point (<i>second revision</i>)	293 : 1980	Code for seaworthy packaging of cotton yarn and cloth (<i>third revision</i>)

<i>IS No.</i>	<i>Title</i>	<i>IS No.</i>	<i>Title</i>
686 : 1985	Methods for determination of colour fastness of textile materials to daylight (<i>first revision</i>)	1954 : 1969	Methods for determination of length and width of fabrics (<i>first revision</i>)
687 : 1979	Method for determination of colour fastness of textile materials to washing, Test 1 (<i>second revision</i>)	1963 : 1981	Methods for determination of threads per unit length in woven fabrics (<i>second revision</i>)
766 : 1988	Method for determination of colour fastness of textile materials to rubbing	1964 : 1970	Methods for determination of weight per square metre and weight per linear metre of fabrics (<i>first revision</i>)
971 : 1983	Method for determination of colour fastness of textile materials to perspiration (<i>first revision</i>)	1969 : 1985	Methods for determination of breaking load and elongation of woven textile fabrics (<i>second revision</i>)
1347 : 1972	Inland packaging of cotton cloth and yarn (<i>first revision</i>)	2454 : 1985	Methods for determination of colour fastness of textile materials to artificial light (xenon lamp) (<i>first revision</i>)
1383 : 1977	Methods for determination of scouring loss in grey and finished cotton textile materials (<i>first revision</i>)	4125 : 1987	Glossary of terms pertaining to defects in fabrics (<i>first revision</i>)
1390 : 1983	Methods for determination of pH value of aqueous extracts of textile materials (<i>first revision</i>)	4905 : 1968	Methods for random sampling

ANNEX B

(Clause 5.3)

EXTRACTS FROM THE GOVERNMENT OF INDIA, MINISTRY OF COMMERCE AND INDUSTRY (TRADE AND MERCHANDISE MARKS) NOTIFICATION NO. S.O. 2937, DATED 20 SEPTEMBER 1962

B-1 A trade description of length stamped on grey, bleached, mercerised or coloured cotton piece goods:

- i) In pieces stamped as of length 9 metres and below the stamped length shall not exceed the actual length by more than 1 percent of the piece length or 7.5 cm whichever is less; and
- ii) In pieces stamped as of length above 9 metres the stamped length shall not exceed the actual length by more than 0.6 percent of the piece length or 7.5 cm whichever is higher.

Provided that the average length of the pieces in question shall not be less than the stamped length.

B-2 A trade description of width stamped on grey, bleached, mercerised or colour cotton

piece goods:

- i) In pieces stamped as of width 102 cm, or below, the stamped width shall not exceed the actual width at any point by more than 1.3 cm.
- ii) In pieces stamped as of width over 102 cm, up to 152 cm the stamped width shall not exceed the actual width at any point by more than 1.25 percent of the stamped width of the piece;
- iii) In pieces stamped as of width 152 cm and above the stamped width shall not exceed the actual width at any point by more than 1.25 percent of the stamped width of the piece or 2.5 cm whichever is less.

Provided that average width of the piece in question shall not be less than the stamped width.

ANNEX C

(Clause 6.1)

LIST OF MAJOR FLAWS

- | | |
|---|---|
| <p>1 One or more ends missing in the body of the material throughout its length, more than three ends missing at a place and running over 60 cm, or prominently noticeable double end running throughout the piece.</p> <p>2 Undressed snarls noticeable over a length exceeding 5 percent of the length of the piece.</p> <p>3 Smash definitely rupturing the texture of the fabric.</p> <p>4 Hole, cut or tear.</p> <p>5 Reed marks prominently noticeable over a length exceeding 5 percent of the piece.</p> <p>6 Defective or damaged selvedge noticeable over a length exceeding 5 percent of the length of the piece.</p> <p>7 Skewing of more than three percent on weft.</p> <p>8 Weft crack or two or more missing picks across the width of the fabric.</p> <p>9 Warp or weft bar due to the difference in raw material, count, twist, lustre, colour, shade or spacing of adjacent groups of yarns (starting mark).</p> | <p>10 More than two adjacent ends running parallel broken or missing and extending beyond 10 cm.</p> <p>11 Noticeable warp or weft float in the body of the fabric.</p> <p>12 Noticeable oil or other stain in the fabric.</p> <p>13 Oily weft in the fabric.</p> <p>14 Prominently noticeable slub.</p> <p>15 Conspicuous broken pattern.</p> <p>16 Gout due to foreign matter, usually lint or waste woven into the fabric.</p> <p>17 Prominent selvedge defect.</p> <p>18 Significant shading or listing in fabrics having a gradual change in tone or depth of shade of fabric (excluding selvedge or border running parallel to the selvedge).</p> <p>19 Coloured flecks.</p> <p>20 Blurred or dark patch.</p> <p>21 Patchy, steaky or uneven dyeing.</p> <p>22 Dye bar.</p> <p>23 Fuzzy appearance.</p> |
|---|---|

ANNEX D

(Table 1)

METHOD FOR DETERMINATION OF MASS OF FABRIC

D-1 Cut four specimens of 100 mm × 100 mm from a sample. Condition all the specimens in the desiccator charged with saturated solution of sodium nitrate at $27 \pm 2^{\circ}\text{C}$ for a period of 24 hours. Remove all the specimens from the

desiccator and immediately determine their collective mass in weighing balance to the nearest milligram.

D-2 Calculate mass of fabric in g/m^2 .

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